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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,171	12/21/2001	Yau Wei Lucas Hui	851663.430USPC	1982

7590 07/23/2007  
Seed Intellectual Property Law Group  
Suite 6300  
701 5th Avenue  
Seattle, WA 98104-7092

EXAMINER
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RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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07/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/914,171

Applicant(s)

HUI ET AL.

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/7/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,9,10,15,16,18-21 and 23-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,10,15,16 and 23-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's arguments filed on 5/7/07 with respect to claims 1-36 have been fully considered but they are not persuasive.
2. Claims 1-2, 9-10, 26-27, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al., (hereinafter referred to as "Martin") in view of Polit et al, (hereinafter referred to as "Polit").
3. Claims 15-16, 18-21, 23-25, 28, 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al., (hereinafter referred to as "Martin") in view of Polit et al., (hereinafter referred to as "Polit"), and further in view of Roeder et al., (hereinafter referred to as "Roeder").
4. The Applicant presents five substantive arguments contending the Examiner's pending rejection of claims 1-2, 9-10, 26-27, and 29-30 under 35 U.S.C. 103(a) as being unpatentable over Martin et al., (hereinafter referred to as "Martin") in view of Polit et al, (hereinafter referred to as "Polit"), and of claims 15-16, 18-21, 23-25, 28, 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al., (hereinafter referred to as "Martin") in view of Polit et al., (hereinafter referred to as "Polit"), and further in view of Roeder et al., (hereinafter referred to as "Roeder"), said rejections being set forth in the Office Action of 11/16/06. However, after a careful consideration of the arguments presented, and further scrutiny of the applied references, the Examiner must respectfully disagree for the reasons that follow, and maintain the grounds of rejection.

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After summarizing the salient features of the claimed invention (Request for Reconsideration of 5/7/07: page 11, lines 1-21), the Applicants argue that the second Polit reference fails to make obvious a combination with Martin because the Polit calculation steps are used for fading detection and not for interlaced/progressive determination (Request for Reconsideration of 5/7/07: page 11, lines 21-30). The Examiner respectfully disagrees. Polit clearly discloses tailoring the fading detection to both non-interlaced frame sequences (Polit: column 3, lines 1-5) and to interlaced signals (Polit: column 3, lines 35-40). The behavior of fading detection for both types of fields are different, and therefore, using the calculation to not only determine the presence of fades, as well as progressive/interlaced signal detection is clearly suggested. Accordingly, the Examiner maintains that Polit's discussion of using the fading detection for both interlaced and progressive fade detection would lead one of ordinary skill in the art to not only use the calculations for fade detection, but also for interlaced/progressive signal detection.

Secondly, the Applicant's argument that Examiner's motivation that Polit teaches calculating the ratio between such difference values in order to get a more accurate measurement of characteristics in a video sequence is incorrect (Request for Reconsideration of 5/7/07: page 12, lines 1-10). The Examiner vehemently disagrees. Fading by itself is a quantifiable characteristic of video sequences, as discussed above, the Examiner notes that Polit discloses using the fading detection in conjunction with both interlaced and progressive video sequences (Polit: column 3, lines 1-10). Furthermore, the Examiner notes that Polit further points the way to using the ratio calculation for other types of processing and not just fading detection (Polit:

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column 5, lines 30-43). Accordingly, the Examiner asserts that one of ordinary skill in the art would look to combine Polit's teaching with Martin as has been done.

Additionally, the Applicants argue that the combination fails "...verifying a scene change has occurred before performing said calculating steps..." as in the claim (Request for Reconsideration of 5/7/07: page 12, lines 18-30; page 13, lines 1-14). The Examiner respectfully disagrees. It is noted that since Polit discloses using the method along *with preprocessing for detelecine devices* (Polit: column 3, lines 25-35), a scene change verification would have been executed as a part of the detelecine operation would have been detected before fade processing of Polit. Accordingly, the Examiner maintains that the limitation is met.

Furthermore, the Applicants argue that the tertiary Roeder reference fails to read upon "calculating pixel differences between the pixel of the first field and two pixels of the second field..." as in the claims (Request for Reconsideration of 5/7/07: page 13, lines 15-30; page 14, lines 1-4). The Examiner respectfully disagrees. It is noted that the figures 1A-1D are fields shown together as a frame (Roeder: column 1, lines 1-25-35: column 7, lines 50-65). Accordingly, looking at figure 1D, for instance,  $L_{n-2}$ ,  $L_n$ ,  $L_{n+2}$  belong to one field, and  $L_{n-1}$  and  $L_{n+1}$  belong to another field. In figure 1D pixel differences from pixel 13 minus pixel 18 and pixel 13 minus pixel 8 are shown to be calculated. This calculation as shown in figure 1D and executed on a field interval (Roeder: column 7, lines 55-60) reads on the limitation. Accordingly, the Examiner maintains that the limitation is met.

Lastly, the Applicants argue that Roeder would still fail to "...suggest selecting the smaller of the two values..." (Request for Reconsideration of 5/7/07: page 14, lines 4-30; page 15, lines 1-14). The Examiner respectfully disagrees. It is noted that Roeder discloses selecting

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the smaller of the two magnitude values, if the pixel differences are below the threshold (Roeder: column 2, lines 60-67; column 3, lines 1-10). The Examiner notes that this reads on the limitation.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

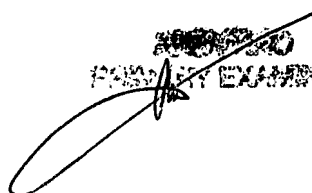
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao  
Primary Examiner  
Art Unit 2621

asr

July 19, 2007

  
PRIMARY EXAMINER